

Notice of Allowability

Application No.

10/799,912

Examiner

Ling-Siu Choi

Applicant(s)

GANI ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/22/2006.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/485,195.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. This Office Action is in response to the Amendment filed September 22, 2006. Claims 1-11 are now pending, wherein Claims 1-7 are drawn to a divinylbenzene cross-linked polystyrene polymer; Claims 8-10 are drawn to a method to produce a divinylbenzene cross-linked polystyrene polymer; Claim 11 is drawn to a microreactor.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. The application has been amended as follows:

Page 1, between line 1 and 3, insert the following paragraph:

--This is a divisional of US Application Serial No. 09/485,1954, filed May 4, 2000, now abandoned, which is a 371 of PCT/GB98/02264, filed August 5, 1998.--

Allowable Subject Matter

4. Claims 1-11 are allowed.

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5. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest references: Ogawa et al. (US 4,600,641) and Noriki et al. (JP 63-220239).

Summary of claim 1:

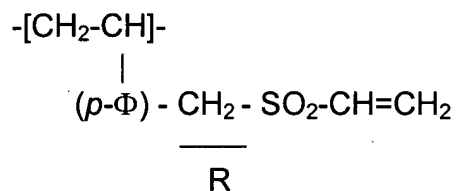
A <u>divinylbenzene cross-linked polystyrene polymer</u> comprising a side chain of Formula I:



wherein R is an alkyl, aryl, oxyalkyl, or oxyaryl linker group
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Summary of claim 5

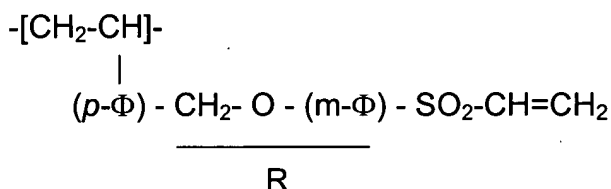
A <u>divinylbenzene cross-linked polystyrene polymer</u> comprising a side chain of Formula II:
--



wherein R is a C ₁₋₆ alkyl linker group
--

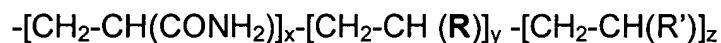
Summary of claim 6

A divinylbenzene cross-linked polystyrene polymer comprising
a side chain of Formula III:



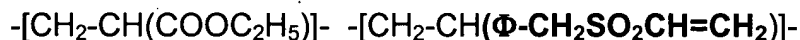
wherein R is an alkyl, aryl, oxyalkyl, or oxyaryl linker group

Ogawa et al. disclose a polymer:



for adhesive layer, wherein R= ~~- Φ -CH₂SO₂CH=CH₂~~ (col. 10, lines 10 and 31). However, Ogawa et al. do not teach or fairly suggest a divinylbenzene crosslinked polystyrene polymer containing the specific side chain.

Noriki et al. disclose a polymer having the following vinylsulfone group:



(Formulae p-6 and p-7 on page 328). However, Noriki et al. do not teach or fairly suggest a divinylbenzene crosslinked polystyrene polymer containing the specific side chain.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

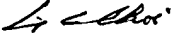
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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.


LING-SUI CHOI
PRIMARY EXAMINER

October 15, 2006